



# UNIVERSITY OF NIŠ

**Course Unit Descriptor**

**Faculty**

Faculty of Mechanical Engineering

## GENERAL INFORMATION

Study Program	<b>Mechanical Engineering</b>		
Study Module (if applicable)	-		
Course Title	Manufacturing Systems		
Level of Study	<input checked="" type="checkbox"/> Bachelor	<input type="checkbox"/> Master's	<input type="checkbox"/> Doctoral
Type of Course	<input type="checkbox"/> Obligatory	<input checked="" type="checkbox"/> Elective	
Semester	<input checked="" type="checkbox"/> Autumn	<input type="checkbox"/> Spring	
Year of Study	III		
Number of ECTS Allocated	5		
Name of Lecturer/Lecturers	Miodrag T. Manić, Vladislav Blagojević		
Teaching Mode	<input checked="" type="checkbox"/> Lectures	<input type="checkbox"/> Group tutorials	<input type="checkbox"/> Individual tutorials
	<input checked="" type="checkbox"/> Laboratory work	<input checked="" type="checkbox"/> Project work	<input checked="" type="checkbox"/> Seminar
	<input type="checkbox"/> Distance learning	<input type="checkbox"/> Blended learning	<input type="checkbox"/> Other

## Purpose and Overview (max. 5 sentences)

Students acquire basic knowledge of the organization and functioning of production systems and stages of formation of products from concept to realization. Training students for analysis and synthesis system management of production processes. The course is targeting both the theoretical and practical aspects of the manufacturing systems.

## Syllabus (brief outline and summary of topics, max. 10 sentences)

1) Definition and structure of the production system, 2) The structure of the production system and the type of production, 3) Production activities, 4) Design of the product, Computer integrated manufacturing, 5) Production facilities, production operations, relationships between production and products, 6) Concepts and mathematical models of production, the price of production operations, 7) Responsibility in the production and organization of production, 8) Tasks application and forms automation of production systems, 9) Technology management system, logic synthesis management, 10) Functional diagrams programmable management, 11) System components and modules PLC\_a, programming languages.

## Language of Instruction

- Serbian (complete course)       English (complete course)       Other \_\_\_\_\_ (complete course)
- Serbian with English mentoring       Serbian with other mentoring \_\_\_\_\_

## Assessment Methods and Criteria

Pre exam Duties	Points	Final Exam	Points
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<b>Activity During Lectures</b>	<b>5</b>	<b>Written Examination</b>	<b>50</b>
<b>Practical Teaching</b>	<b>10</b>	<b>Oral Examination</b>	<b>Max. 35 (depending on Teaching Colloquia)</b>
<b>Teaching Colloquia</b>	<b>35</b>	<b>Overall Sum</b>	<b>100</b>
<b>*Final examination mark is formed in accordance with the Institutional documents</b>			